Mr. John Wirthwein
Styline Industries Manufacturing
1002 North Chestnut
Huntingburg, Indiana 47542

Re: Minor Source Modification No: **037-10893-00102**

Dear Mr. Wirthwein:

Styline Industries Manufacturing applied for a Part 70 operating permit (T037-8056-00102) on November 2, 1998 for a stationary wood office furniture manufacturing facility. An application to modify the source was received on April 23, 1999. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

(a) One (1) spray booth, located in Plant #5, identified as B-9, with a maximum capacity of 125 pounds of finished wood per hour, using a dry filter for control and exhausting to stack 9. This new booth will be added to the existing eight (8) spray booths, identified as B1-8 located in Plant #5: (602 West 12th Street, Huntingburg, Indiana).

(b) One (1) natural gas-fired drying oven, located in Plant #5, identified as O-4, with a rated heat input of 0.9 million Btu per hour (mmBtu/hr).

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter please contact Phillip Ritz, at 973-575-2555 (ext. 3241) or 1-800-451-6027 press 0 and ask for extension 3-6878.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
PR/EVP
cc: File - Dubois County
U.S. EPA, Region V
Dubois County Health Department
Air Compliance Section Inspector Ray Schick
Compliance Data Section - Mindy Jones
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 MINOR SOURCE MODIFICATION
OFFICE OF AIR MANAGEMENT

Styline Industries Manufacturing
210 West Ninth Street
Huntingburg, Indiana 47542

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

First Minor Source Modification: 037-10893-00102	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary wood office furniture manufacturing facility.

Responsible Official:	Robert H. Menke, Jr.
Source Address:	210 West Ninth Street, Huntingburg, Indiana 47542
Mailing Address:	P.O. Box 100, Huntingburg, Indiana 47542
SIC Code:	2521
County Location:	Dubois
County Status:	Attainment area for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, Section 112 of the Clean Air Act Minor Source, under PSD Rules

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) spray booth, located in Plant #5, identified as B-9, with a maximum capacity of 125 pounds of finished wood per hour, using a dry filter for control and exhausting to stack 9. This new booth will be added to the existing eight (8) spray booths, identified as B1-8 located in Plant #5: (602 West 12th Street, Huntingburg, Indiana).

(b) One (1) natural gas-fired drying oven, located in Plant #5, identified as O-4, with a rated heat input of 0.9 million Btu per hour (mmBtu/hr).

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this approval, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the “responsible official” as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

Testing Requirements [326 IAC 2-7-6(1)]

C.6 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.7 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this approval. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this approval. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.8 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this approval until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.9 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.11 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.12 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this approval;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from a approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.13 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.

(c) Unless otherwise specified in this approval, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1 FACILITY OPERATION CONDITIONS

Plant #5

Facility Description [326 IAC 2-7-5(15)]

(a) One (1) spray booth, located in Plant #5, identified as B-9, with a maximum capacity of 125 pounds of finished wood per hour, using a dry filter for control and exhausting to stack 9. This new booth will be added to the existing eight (8) spray booths, identified as B1-8 located in Plant #5: (602 West 12th Street, Huntingburg, Indiana).

(b) One (1) natural gas-fired drying oven, located in Plant #5, identified as O-4, with a rated heat input of 0.9 million Btu per hour (mmBtu/hr).

Emission Limitations and Standards [326 IAC 2-7-5(1)] - Spray booths

D.1.1 General Provisions Relating to HAPs [326 IAC 20-14][40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-14, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart JJ.

D.1.2 Wood Furniture NESHAP [40 CFR 63, Subpart JJ]

(a) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-14, (40 CFR 63, Subpart JJ).

(b) Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:

(1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:

(A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of one (1.0) pound VHAP per pound solids; or

(B) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content of one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. All other thinners have a ten percent (10.0%) maximum VHAP content by weight; or

(C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or

(D) Use a combination of (A), (B), and (C).

(2) Limit VHAP emissions from contact adhesives as follows:

(A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed 1.8 pound VHAP per pound solids.

(B) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed one

one (1.0) pound VHAP per pound solids.

(C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.

(3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids.

D.1.3 Work Practice Standards [40 CFR 63.803]

The owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan within sixty (60) calendar days after the compliance date. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803:

(a) Operator training course.
(b) Leak inspection and maintenance plan.
(c) Cleaning and washoff solvent accounting system.
(d) Chemical composition of cleaning and washoff solvents.
(e) Spray booth cleaning.
(f) Storage requirements.
(g) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
(h) Line cleaning.
(i) Gun cleaning.
(j) Washoff operations.
(k) Formulation assessment plan for finishing operations.

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.1.5 Particulate Matter (PM) [326 IAC 6-1-2]

The particulate matter (PM) from spray booths B9 located in Plant #5 shall be limited to 0.03 grain per dry standard cubic foot (dscf).

Because the spray booths utilizes dry filters to meet the requirements of 326 IAC 6-1-2, the requirements of 326 IAC 2-2 and 40 CFR 52.21 are satisfied.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63]

(1) Pursuant to 40 CFR 63, Subpart JJ, if the Permittee elects to demonstrate compliance using 63.804(a)(3) or 63.804(c)(2) or 63.804(d)(3) or 63.804(e)(2), performance testing must be conducted in accordance with 40 CFR 63, Subpart JJ and 326 IAC 3-6.

(2) IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the Hazardous Air Pollutant (HAP), VOC and particulate matter limits specified in Conditions D.1.2, D.1.4 and D.1.5 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.7 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.8 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times the spray booths are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.9 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the one (1) spray booth, located in Plant #5, identified as B-9, and exhausting to stack 9 while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

(a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.1.2.

(1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.

(2) The HAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.

(3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable coating used.

(4) The VHAP content in weight percent of each thinner used.

(5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.

(b) To document compliance with Condition D.1.3, the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.

(c) To document compliance with Condition D.1.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

(a) An Initial Compliance Report to document compliance with Condition D.1.2 and the Certification form, shall be submitted within sixty (60) days following startup. The Initial Compliance Report must include data from the entire month that the compliance date falls.

(b) A semi-annual Continuous Compliance Report to document compliance with Condition D.1.2 and the Certification form, shall be submitted within thirty (30) days after the end of the six (6) months being reported.

For the first year following the compliance date, the Continuous Compliance Reports shall cover the following months:

(1) November 21, 1997 through May 20, 1998.

(2) May 21 through November 30, 1998.

(3) December 1 through December 31, 1998.

(c) Following the first year of reporting, the semi-annual Continuous Compliance Report shall be submitted on a calendar year basis with the reporting periods ending June 30 and December 31.

(d) The reports required in (a), (b) and (c) of this condition shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
Semi-Annual Report

VOC and VHAP usage - Wood Furniture NESHAP

Source Name: Styline Industries Manufacturing
Source Address: 210 West Ninth Street, Huntingburg, Indiana 47542
Mailing Address: P.O. Box 100, Huntingburg, Indiana 47542
Operation Permit No.: T037-8056-00102
Source Modification No.:037-10893-00102
Facility: Surface Coating
Parameter: VOC and VHAPs - NESHAP
Limit: (1) Finishing operations -1.0 lb VHAP/lb Solids
(2) Thinners used for on-site formulation of washcoats, basecoats and enamels - 3% VHAP content by weight
(3) All other thinner mixtures - 10% VHAP content by weight
(4) Foam adhesives meeting the upholstered seating flammability requirements - 1.8 lb VHAP/lb Solids
(5) All other contact adhesives - 1.0 lb VHAP/lb Solids
(6) Strippable spray booth material - 0.8 pounds VOC per pound solids

YEAR:_____

Month	Finishing Operations (lb VHAP/lb Solid)	Thinners used for on-site formulation (% by weight)	All other thinner mixtures (% by weight)	Foam adhesives (upholstered) (lb VHAP/lb Solid)	Contact adhesives (lb VHAP/lb Solid)	Strippable spray booth material (lb VOC/lb Solid)
1						
2						
3						
4						
5						
6						

9 No deviation occurred in this six month period.

9 Deviation/s occurred in this six month period.
Deviation has been reported on:

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Minor Source Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	Styline Industries Manufacturing
Source Location:	210 West Ninth Street, Huntingburg, Indiana 47542
County:	Dubois
SIC Code:	2521
Operation Permit No.:	T037-8056-00102
Source Modification No.:	037-10893-00102
Permit Reviewer:	Phillip Ritz/EVP

The Office of Air Management (OAM) has reviewed a modification application from Styline Industries Manufacturing relating to the construction and operation of an off-line spray booth and oven.

Source Definition

As determined during the review of Part 70 Operating Permit No. T037-8056-00102, this wood office furniture manufacturing company consists of seven (7) plants:

(1) Plant 3 is located at 704 North Chestnut Street, Huntingburg, Indiana;

(2) Plant 5 is located at 1002 North Chestnut Street, Huntingburg, Indiana;

(3) Plant 6 is located at 908 North Chestnut Street, Huntingburg, Indiana;

(4) Plant 8 is located at 1008 North Chestnut Street, Huntingburg, Indiana;

(5) Plant 9 is located at 602 West 12th Street, Huntingburg, Indiana;

(6) Plant 15 is located at 209 West 9th Street, Huntingburg, Indiana; and

(7) Plant 18 is located at 109 West 10th Street, Huntingburg, Indiana.

Since the seven (7) plants are located in contiguous properties, have the same SIC codes and are owned by one (1) company, they will be considered one (1) source.

History

On April 23, 1999, Styline Industries Manufacturing submitted an application to the OAM requesting to add additional surface coating lines to their existing plant. Styline Industries Manufacturing applied for a Part 70 permit (T037-8056-00102) which was public noticed on November 2, 1998.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

(a) One (1) spray booth, located in Plant #5, identified as B-9, with a maximum capacity of 125 pounds of finished wood per hour, using a dry filter for control and exhausting to stack 9. This new booth will be added to the existing eight (8) spray booths, identified as B1-8 located in Plant #5: (602 West 12th Street, Huntingburg, Indiana).

(b) One (1) natural gas-fired drying oven, located in Plant #5, identified as O-4, with a rated heat input of 0.9 million Btu per hour (mmBtu/hr).

Existing Approvals

The source applied for a Part 70 Operating Permit on December 18, 1996. The source has been operating under previous approvals including, but not limited to, the following:

The source has been operating under previous approvals including, but not limited to, the following:

(1) CP 037-2880, issued on January 25, 1993;

(2) CP 037-1992, issued on June 25, 1991; upgraded to CP 037-8439, issued on July 23, 1997;

(3) OP 19-09-90-0302, issued on January 30, 1987;

(4) Exempt 037-3126, issued on December 14, 1993;

(5) CP 037-3008, issued on February 24, 1994;

(6) OP 19-10-90-0292, issued on November 17, 1986;

(7) OP 19-10-90-0293, issued on November 17, 1986;

(8) OP 19-03-91-0326, issued on October 9, 1987;

(9) Letter of Registration 19-01-85-0200, issued on April 25, 1985;

(10) Letter of Registration 19-11-80-0124, issued on February 23, 1982; and

(11) CP 037-1858, issued on July 11, 1990.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
B-9		19	2 x 36"	2 x 17,000	ambient

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 23, 1999. Additional information was received on May 13, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 4).

Potential to Emit for the New Emission Units and Pollution Control Equipment

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	3.31
PM-10	3.31
SO_2	0.00
VOC	10.73
CO	0.33
NO_x	0.39

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Xylene	0.70
Toluene	1.10
Formaldehyde	0.04
MIK	0.69
Methanol	0.41
MEK	1.24
Phenol	0.55
TOTAL	4.73

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)), for the New Emission Units and Pollution Control Equipment, of VOC are greater than 10 tons per year and less than 25 tons per year. Therefore, the modification is subject to the provisions of 326 IAC 2-7-10.5(d).

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant

emission units.

	Limited Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	Any Single HAP	Total HAPs
One (1) spray booth, identified as B-9	0.16	0.16	0.00	10.71	0.00	0.00	(MEK)1.24	4.73
One (1) natural gas-fired drying oven, identified as O-4	0.03	0.03	0.00	0.02	0.33	0.39	0.00	0.00
Total Emissions	3.31	3.31	0.00	10.73	0.33	0.39	(MEK)1.24	4.73

Note: Pursuant to Part 70 Permit (T037-8056-00102), a Part 70 permit which was public noticed on November 2, 1998. ,Plant #5 SB1-SB8 have a PSD threshold of less than 250 tons per year. The source is adding the proposed spray booth to the existing Plant #5 SB1-SB8 for the purpose of increased worker safety and flexibility and will maintain its current potential to emit of VOC of less than 250 tons per year limit under the Part 70 permit which was public noticed on November 2, 1998. Since this modification to the existing line will not increase potential to emit VOC, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

County Attainment Status

The source is located in Dubois County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Dubois County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) The one (1) off-line downdraft spray booth identified as B-9 in Plant #5 is subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63.800, Subpart JJ).

Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:

(1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:

(A) Achieve a weighted average volatile hazardous air pollutant (VHAP)

content across all coatings of one (1.0) for existing pound VHAP per pound solids; or

(B) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content of one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. All other thinners have a ten percent (10.0%) maximum VHAP content by weight; or

(C) Use a control device to limit emissions to one (1.0) for existing pound VHAP per pound solids; or

(D) Use a combination of (A), (B), and (C).

(2) Limit VHAP emissions from contact adhesives as follows:

(A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed 1.8 for existing pound VHAP per pound solids.

(B) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed one one (1.0) for existing pound VHAP per pound solids.

(C) Use a control device to limit emissions to one (1.0) for existing pound VHAP per pound solids.

(3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids.

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63.800, Subpart JJ.

State Rule Applicability - Entire Source

There are no new State Rules applicable on a source-wide basis due to this First Minor Source Modification. All source-wide State Rules cited in Part 70 Operating Permit T037-8056-00102, which was public noticed on November 2, 1998, continue to apply to this source.

State Rule Applicability - Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to the Part 70 Permit (T037-8056-00102), which was public noticed on November 2, 1998, this modification relating to the construction and operation of an off-line spray booth and oven, located in Plant #5, will not increase the coating operation's potential to emit of VOC to greater than 250 tons per year. Pursuant to Part 70 Permit (T037-8056-00102), which was public noticed on November 2, 1998, the source will maintain its less than 250 ton per year VOC limit. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) will not apply to this facility.

326 IAC 6-1-2 Particulate Emission Limitations

The particulate matter emissions from spray booth SB9, located in Plant #5 is subject to the requirements of 326 IAC 6-1-2 (Particulate Emissions Limitations), as the source is located in Dubois County. The particulate matter (PM) from spray booth SB9, located in Plant #5, shall be limited to 0.03 grain per dry standard cubic foot (dscf), which limits the particulate matter

emissions to 8.74 pounds per hour or 38.3 tons per year. The source will comply with the requirements under 326 IAC 6-1-2 by utilizing dry filters for controlling particulate matter emissions to 0.16 tons per year. Because the spray booth is limited to the requirements of 326 IAC 6-1-2, the requirements of 326 IAC 2-2 and 40 CFR 52.21 are satisfied.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

This facility is in compliance because High Volume Low Pressure (HVLP) applications are used.

No other 8 rules apply to this source.

Compliance Requirements

Permits issued under 326 IAC 2-7are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

;

(1) Spray Booth SB9 located in Plant #5, has applicable compliance monitoring conditions as specified below:

The dry filters used as overspray control for the spray booths have applicable compliance monitoring conditions as specified below:

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters,

weekly observations shall be made of the overspray from the surface coating booth stacks while the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters for Spray Booth SB9 must operate properly to ensure compliance with 326 IAC 6-1-2 Particulate Emission Limitations and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

(a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

(b) See attached calculations for detailed air toxic calculations. (Appendix A, page 4 of 4)

Conclusion

The operation of this off-line spray booth and oven shall be subject to the conditions of the attached proposed **Minor Source Modification No. 037-10893-00102**.

Appendix A: Emission Calculations

Company Name: Styline Industries Manufacturing
Address City IN Zip: 210 West Ninth Street, Huntingburg, IN 47542
Plt ID: 037-10893-00102
Reviewer: Phillip Ritz/EVP
Date: April 23, 1999

Uncontrolled Potential Emissions (tons/year)

	Emissions Generating Activity		
Pollutant	Surface Coating Booth B9	Natural Gas Oven O-4	**TOTAL**
PM	3.28	0.03	3.31
PM10	3.28	0.03	3.31
SO2	0.00	0.00	0.00
NOx	0.00	0.39	0.39
VOC	10.71	0.02	10.73
CO	0.00	0.33	0.33
total HAPs	4.73	0.00	4.73
worst case single HAP	MEK 1.24	0.00	MEK 1.24

Total emissions based on rated capacity at 8,760 hours/year.

Controlled Potential Emissions (tons/year)

	Emissions Generating Activity		
Pollutant	Surface Coating Booth B9	Natural Gas Oven O-4	**TOTAL**
PM	0.16	0.03	0.19
PM10	0.16	0.03	0.19
SO2	0.00	0.00	0.00
NOx	0.00	0.39	0.39
VOC	10.71	0.02	10.73
CO	0.00	0.33	0.33
total HAPs	4.73	0.00	4.73
worst case single HAP	MEK 1.24	0.00	MEK 1.24

Total emissions based on rated capacity at 8,760 hours/year, after control.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Styline Industries Manufacturing
Address City IN Zip: 210 West Ninth Street, Huntingburg, IN 47542
Plt ID: 037-10893-00102
Reviewer: Phillip Ritz/EVP
Date: April 23, 1999

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
60o Lacquer	7.6	76.80%	0.0%	76.8%	0.0%	23.20%	0.28000	1.500	5.82	5.82	2.45	58.68	10.71	0.81	25.09	75%
Catalyst	9.9	28.00%	0.0%	28.0%	0.0%	59.50%	0.28000	1.500	2.77	2.77	1.17	27.97	5.10	3.28	4.66	75%
Lac Sealer	7.5	67.70%	0.0%	67.7%	0.0%	24.10%	0.28000	1.500	5.07	5.07	2.13	51.11	9.33	1.11	21.04	75%
ate Potential Emissions			**Add worst case coating to all solvents**								**2.45**	**58.68**	**10.71**	**3.28**		

Control Efficiency:		Controlled	Controlled	Controlled	Controlled
VOC	PM	VOC lbs per Hour	VOC lbs per Day	VOC tons per Year	PM tons/yr
0.00%	95.00%	**2.45**	**58.68**	**10.71**	**0.16**

METHODOLOGY
Only one coating can be applied at one time, therefore only the worst case coating for each criteria pollutant is considered.
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

HAP Emission Calculations

Company Name: Styline Industries Manufacturing
Address City IN Zip: 210 West Ninth Street, Huntingburg, IN 47542
Plt ID: 037-10893-00102
Reviewer: Phillip Ritz/EVP
Date: April 23, 1999

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % MIK	Weight % Methanol	Weight % MEK	Weight % Phenol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	MIK Emissions (ton/yr)	Methanol Emissions (ton/yr)	MEK Emissions (ton/yr)	Phenol Emissions (ton/yr)
60 Lacquer	7.6	0.28000	1.500	5.00%	8.00%	0.30%			5.00%		0.70	1.12	0.04	0.00	0.00	0.70	0.00
Catalyst	9.9	0.28000	1.500							3.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.55
Lac Sealer	7.5	0.28000	1.500		8.00%		5.00%	3.00%	9.00%		0.00	1.10	0.00	0.69	0.41	1.24	0.00
Total State Potential Emissions											**0.70**	**1.10**	**0.04**	**0.69**	**0.41**	**1.24**	**0.55**

4.730605

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emission Calculations
Natural Gas Combustion
MM Btu/hr 0.3 - < 100

Company Name: Styline Industries Manufacturing
Address City IN Zip: 210 West Ninth Street, Huntingburg, IN 47542
Plt ID: 037-10893-00102
Reviewer: Phillip Ritz/EVP
Date: April 23, 1999

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.9	7.9

Heat Input Capacity includes:
One (1) drying oven, with a rated heat input of 0.9 mmBtu per hour, identifed as O-4

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.03	0.03	0.00	0.39	0.02	0.33

Methodology:
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 50, Flue gas recirculation = 32
All PM is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors may be used to estimate PM10, PM2.5, and PM1 em
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1 and 1.4-2, SCC #1-01-006-02, #1-02-006-02, #1-03-006-02, #1-03-006-03
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton